

New Hampshire Department of Transportation

Qualified Products List

Issue 2007-1 September 17, 2007

NOTICE

- Products appearing on this list have been pre-qualified by the Department for general use. Unless noted otherwise, these products may be used on Highway and Bridge projects, under the Section/Item Number indicated, without further testing.
- A Certificate of Compliance is required for these materials.
- A product that falls into one of these categories and is not listed shall not be used, unless qualified through written request to the NHDOT, Bureau of Materials & Research. Such request shall be made with sufficient lead-time to allow for any necessary testing and/or research.
- Products shall conform to NH Code of Administrative Rules Chapter Env-A 4200 AIM, available from the NH Department of Environmental Services or at http://des.nh.gov/ard/aim_coatings.htm. Inclusion of a product on this list does not imply that the product meets the above chapter or any other applicable State or Federal regulations related to safety or environmental issues in effect at the time.
- The manufacturer's Material Safety Data Sheet (MSDS) should be referred to before use of any product appearing on this list.
- Unless denoted otherwise in the plans or specifications, manufacturer recommendations related to preparation, application, coverage and shelf life shall be followed for all products appearing on this list.
- Report any failure, incompatibility or other problem associated with any product on this list to:

Research Supervisor, NHDOT Bureau of Materials & Research PO Box 483, Concord, NH 03302-0483 Tel: (603) 271-3151

> Fax: (603) 271-8700 E-mail: wreal@dot.state.nh.us



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SECTION 403 - HOT BITUMINOUS PAVEMENT

A. Not currently used

B. ITEM 403.1109 - MODIFIER FOR HIGH STRENGTH HOT BITUMINOUS PAVEMENT

Use only when specified.

Manufacturer: Product

American Gilsonite Co. Gilsonite HMA Modifier (8% by weight of asphalt cement)

C. ITEM 403.6 - PAVEMENT JOINT ADHESIVE

Manufacturer: Product

Crafco, Inc. Crafco Pavement Joint Adhesive

SECTION 413 - HOT-POURED CRACK SEALANT

A. ITEM 413.1 - HOT POURED CRACK SEALANT (AASHTO M 324, Type II)

Note: Acceptance of actual shipments will be based on test results of samples taken at the construction site.

Manufacturer:Product:American PermaquikPermaquik 6195Crafco Inc.Road Saver 201SemMaterials, L.P. (formerly Koch Mat'ls Co.)Product #9005The Pavement Depot/Dalton EnterprisesCrack-Rite HP3405W.R. MeadowsHi-Spec

B. ITEM 413.2 - HOT POURED CRACK SEALANT (LOW MODULUS, AASHTO M 324, Type IV, modified)

Note: Acceptance of actual shipments will be based on test results of samples taken at the construction site.

Manufacturer: Product:

Bemac Products (McAsphalt Industries)

BERAM 195 Low Modulus

Crafco, Inc. Road Saver 231

Deery American Corp. DAC Hot Poured Crack Sealant DAC 101

SemMaterials, L.P. (formerly Koch Mat'ls Co.) Product #9030

SECTION 510 - BEARING PILES

A. ITEM 510.65 - DRIVING POINTS FOR STEEL BEARING PILES

Conforming to AASHTO M 103 (ASTM A27), Grade 65-35 or ASTM A148, Grade 90-60

Manufacturer: Product:

Assoc. Pile & Fitting Corp. Hard-Bite HP 77600-B Assoc. Pile & Fitting Corp. Hard-Bite HP 77750-B Hard-Bite HP 7780-B * Assoc. Pile & Fitting Corp. Assoc. Pile & Fitting Corp. Pruyn Point HP 75750-B Dougherty Foundation Prod., Inc. Tuftip Tufloy H-776 * Tuftip Tufloy H-777 * Dougherty Foundation Prod., Inc. Mid-America Foundation Supply Model HPH ** Piling Accessories, Inc. Super-Bite PAR-T Series Versa-Bite VB 300-P Series Versabite Piling Accessories Versa-Steel Inc. Versa Steel VS-300N Series

* Available only in Grade 90-60

** Available only in Grade 65-35



SECTION 520 - PORTLAND CEMENT CONCRETE

A. FAST SET NON-SHRINK PATCHING MORTAR (For Bridge Deck Repairs)

Manufacturer: Product:

BASF (Master Builders, Inc.) 10-60 Rapid Mortar Conspec Marketing & Manufacturing Pave Patch 3000 Five Star Products Structural Concrete

Five Star Products Structural Concrete V/O Patch **

Silpro Masonry Systems Fastcrete *

- * High Early Strength (1000 psi minimum at 1 hour lab)
- ** Recommended also for vertical/overhead patching

B. ACCELERATING ADMIXTURES

Contact the Concrete Supervisor at Materials & Research (603-271-3151) for products when required.

C. AIR ENTRAINING ADMIXTURES

Manufacturer:Product:BASF (formerly Master Builders, Inc.)MB AE 90 *BASF (formerly Master Builders, Inc.)Micro-Air *Sika CorporationSika Air *W.R. Grace & Co.Daravair 1000 *W.R. Grace & Co.Daravair AT60 *W.R. Grace & Co.Darex II *

D. WATER REDUCING ADMIXTURES

Manufacturer: Product:

BASF (Formerly Degussa Admixtures, Inc.)
BASF (Formerly Degussa Admixtures, Inc.)
BASF (Formerly Master Builders)

Glenium 3400 NV *
PolyHeed 1020
PolyHeed 1025

BASF (formerly Master Builders, Inc.)

BASF (formerly Master Builders, Inc.)

BASF (formerly Master Builders, Inc.)

Polyheed 997 (Midrange) *
Pozzolith 200N *
Pozzolith 220N *

BASF (formerly Master Builders, Inc.) Rheobuild 1000 * W.R. Grace & Co. Adva 100 *

 W.R. Grace & Co.
 Daracem 55 (Midrange) *

 W.R. Grace & Co.
 Daracem 65 (Midrange) *

 W.R. Grace & Co.
 WRDA/HYCOL *

E. RETARDING ADMIXTURES

Manufacturer: Product:

BASF (formerly Master Builders, Inc.)

BASF (formerly Master Builders, Inc.)

Pozzolith 100XR *

Pozzolith 122R *

W.R. Grace & Co.

Daratard 17 *

^{*}These concrete admixtures must be tested through the AASHTO NTPEP program by January 2008 to remain on the Qualified Products List.

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F. SUPERPLASTICIZERS (Type G)

Manufacturer:Product:BASF (formerly Master Builders, Inc.)Rheobuild 716 I *W R GraceADVA 170 *W.R. GraceADVA 140 *W.R. Grace & Co.Daracem 100 *

*These concrete admixtures must be tested through the AASHTO NTPEP program by January 2008 to remain on the Qualified Products List.

G. CORROSION INHIBITORS

Manufacturer:Product:BASF (formerly Master Builders, Inc.)Rheocrete CNI *Sika CorpCNI *W.R. Grace & Co.DCI *W.R. Grace & Co.DCI-S *

*These concrete admixtures must be tested through the AASHTO NTPEP program by January 2008 to remain on the Qualified Products List.

H. CURING COMPOUNDS

See specifications for limitations regarding the use of curing compounds.

Manufacturer: Product:

Bonsal American
Dayton Superior
D.S.S.C.C. White Resin Cure
L&M Construction Chemicals Inc.
Poly Sat Inc.

Bonsal Curing Compound
D.S.S.C.C. White Resin Cure
Cure R (w/fugitive dye)
Harris Super Konkure White

I. BONDING AGENTS (Fresh Concrete to Hardened Concrete)

Note: Bonding agents to be used only when specified. Application to be per manufacturer's recommendation.

Manufacturer: Product:

BASF (formerly Master Builders, Inc.) Concresive Liquid LPL

J. BONDING AGENTS (Fresh Concrete to Steel)

Note: Bonding agents to be used only when specified. Application to be per manufacturer's recommendation.

Manufacturer:Product:Sika CorpArmatec 110

K. PLASTIC BEARING STRIP (For Expansion End)

Manufacturer: Product:

Korolath of New England Korolath PE (Contact Cement - Sikadur 31 Hi-Mod Gel)

L. CLOSED CELL EXPANSION MATERIAL

Use only when specified.

Manufacturer: Product:

E-poxy Engineered Materials, LLC Evazote 380 E.S.P. (w/ Eva-Pox Bonder No. 1)

M. CLOSED CELL FILLER MATERIAL

Manufacturer:Product:Dow Corning Corp.STYROFOAMOwens CorningFoamular 250



Section 520 - continued

N. POLYMER-MODIFIED, 2-COMPONENT, FAST SETTING CONCRETE PATCH

Use only when specified.

Manufacturer: Produc

Sonneborn Building Prods./ChemRex Sonopatch 200 with Sonocrete Acrylic Ad.

O. SELF-CONSOLIDATING CONCRETE ADMIXTURE

Contact the Concrete Supervisor at Materials & Research (603-271-3151) for products when required.

SECTION 526 - CONCRETE CRACK SEALERS

A. ITEM 526.2 - EPOXY FOR NON-MOVING CRACKS

Manufacturer:Product:BASF (formerly Master Builders, Inc.)Concresive 1380Dayton SuperiorSure-Inject J-56Dural International (TammsInd.)Dural crete

E-Poxy Industries, Inc. Injection Resin #4

Hilti, İnc. Hilti CI 060 EP Crack Injection System
Sika Corp (Cool Weather) Sikadur 52

Sika Corp (Cool Weather) Sikadur 52 Sika Corp. (Warm Weather) Sikadur 35 Sinmast Product #2

B. ITEM 526.3 - HIGH MOLECULAR WEIGHT METHACRYLATE CRACK SEALER

Manufacturer: Product:
Sika Corp SikaPronto 19

SECTION 529 - PRESTRESSED CONCRETE BRIDGE DECK

A. ITEM 529.1 - HIGH STRENGTH, IMPACT RESISTANT, NON-SHRINK GROUT

Manufacturer: Product:

Conspec Marketing & Manufacturing Co. Conspec 100 Non-Shrink Non-Metallic Grout

Dayton Superior Suregrip High Performance Grout

Sonneborn Building Products/ChemRex Sonogrout 14K Hy Flow

SECTION 530 - WATERPROOFING CONCRETE SURFACES

A. ITEM 530.3 - CEMENT BASE WITH ACRYLIC LATEX (2 Coats)

Manufacturer: Product:

BASF (Formerly Degussa) Thoroseal (Pearl Gray) w/Acryl 60
Tamms Industries Tamoseal (Oyster Gray) w/AKKRO-7T

B. ITEM 530.3 - CEMENT BASE, POLYMER MODIFIED (2 Coats)

Manufacturer: Product:

BASF (Formerly Degussa)
ThoRoc Cement Coating (Gray)
Flexcrete Limited
Silcabond FCR 851 (Gray)
Tamms Industries
Duraltop Coating (Gray)



SECTION 532 - ANTI-GRAFFITI COATINGS

A. ITEM 532.1 - SEMI-PERMANENT ANTI-GRAFFITI COATINGS (CLEAR)

Manufacturer: Product:

Professional Products of Kansas, Inc. PROFESSIONAL Water Sealant Anti-Graffiti *, GRAFFITI FREE cleaner

* Coat #1 - Super-strength (15% solids), Coat #2 - Extra-strength (8% solids) or Super-strength, in accordance with manufacturer's recommendations

SECTION 534 - WATER REPELLENT

A. ITEM 534.1 - LINSEED OIL (Anti-spalling Compound)

Manufacturer: Product:

A.H. Harris and Sons, Inc.

Harris Super Antispall Voc
Dayton Superior

Day-Chem Anti-Spall (J-33)

Tamms Industries Tri-Dar 66/1A *

B. ITEM 534.3 - SILANE/SILOXANE

These products can be used when ambient and surface temperatures are 40 degrees and above.

Manufacturer: Product:

Advanced Chemical Technologies, Inc.

Degussa (formerly Sivento)

Sil-Act ATS 42 *
Protectosil BH-N

ProSoCo, Inc. SL 100
ProSoCo, Inc. SLX100
Vexcon Chemicals, Inc. Powerseal 40

C. ITEM 534.3 - SILANE/SILOXANE - COLD WEATHER

These products can be used when ambient and surface temperatures are 20 degrees and above.

Manufacturer: Product:

Sivento Inc. Chem-Trete BSM 40 VOC *

SECTION 535 - EPOXY WATERPROOFING

A. ITEM 535.1 - BITUMEN EPOXY WATERPROOFING

Manufacturer: Product:

Anti-Hydro Company A-H Coal Tar Epoxy 210
Kop-Coast Div./Carboline Bitumastic 300-M
Tamms Industries Dural 306

SECTION 536 - EPOXY COATING FOR CONCRETE

A. ITEM 536.11 - EPOXY COATING FOR CONCRETE (Mortar Coat/Seal Coat)

Manufacturer: Product:

Dural International (TAMMS Ind.)

Flexocrete Gel/Dural 304

Sika Corporation

Sikadur 23 LM Gel/Sikagard 62

^{*} The VOC content of this product exceeds currently allowed levels. This product may only be used if manufactured prior to January 1, 2007 and if within manufacturer's specified shelf life.

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^{*} The VOC content of this product exceeds currently allowed levels. This product may only be used if manufactured prior to January 1, 2007 and if within manufacturer's specified shelf life.



Section 536 - continued

B. ITEM 536.3 - HIGH BUILD, HIGH GLOSS, WHITE EPOXY COATING FOR CONCRETE

Manufacturer:Product:Dural International (Tamms)DuralkoteKaufman Products Inc.Sure-Poxy Hi-BildSika CorporationSikagard 62

SECTION 537 - CONCRETE SEALER

A. HIGH SOLIDS ACRYLIC SEALER (Two Coats)

Manufacturer:Product:A.H. Harris and Sons, Inc.Certi-vex AC1315 *Silpro CorporationCrete SealTammsLuster Seal 300 *

B. FERROUS STAIN REMOVER

Manufacturer: Product:

ProSoCo Sure-Klean Ferrous Remover

SECTION 538 - BARRIER MEMBRANE

A. ITEMS 538.1 AND 538.2 - WARM WEATHER APPLICATION

(Temp. 40 Degs. F and rising)

Manufacturer: Product:

Royston Laboratories 10 AN Easy Pave, 713A Primer, 104CM Mastic

Required Laydown Temperature - Hot Bituminous Pavement (538.3.5) = 290 - 330 deg. F

B. ITEM 538.2 - COOL WEATHER APPLICATION

(Temp. 25 Degs F and rising)

Manufacturer: Product:

Protecto Wrap Co. Jiffy Seal 140/60 Cold Weather, VOC 100 Primer, 160H Mastic

Royston Laboratories Inc. 104-AHT, 740 Primer, 104CM Mastic

W.R. Meadows Inc. Seal Tight Mel-Rol, MEL-Prime VOC Solvent Base Primer, Elastomeric Mastic

W.R.Grace & Co Lo Temp Membrane, Bituthene Primer B2, Bituthene Mastic

C. PROTECTION BOARD FOR BARRIER MEMBRANE

(Use on membraned surfaces to be backfilled against)

Manufacturer: Product:

- 1.0" Closed-Cell Extruded Polystyrene Board
- 1/2" 100% Bituminous Impregnated Fiber Board

W.R. Grace & Co. Bituthene Asphaltic Hardboard

W.R. Meadows Sealtight Melnar W.R. Meadows Sealtight PC-2

D. ITEM 538.3 - BARRIER MEMBRANE, LIQUID SPRAY

Manufacturer: Product

Stirling Lloyd Products Eliminator, PAR 1 Primer, SA 1030 Tack Coat

Required Laydown Temperature - Hot Bituminous Pavement (538.3.5) = 290 - 330 deg. F

^{*} The VOC content of this product exceeds currently allowed levels. This product may only be used if manufactured prior to January 1, 2007 and if within manufacturer's specified shelf life.



Section 538 - continued

E. ITEM 538.4 - BARRIER MEMBRANE, HOT RUBBERIZED ASPHALT

(For use along curb line with Items 538.5 and 538.6)

Manufacturer: Product

Bemac Products (McAsphalt)

Henry Company

Hydrotech Membrane Corp.

Permaquik Corp.

Ultraseal Construction Products

Watson Bowman Acme Corporation

Bemalastic 1213 B.D.M.

P90-11 MTO Grade

Hydrotech BDM

PQ 6100 BM

Ultraseal 3750

Wabo Expandex

F. ITEM 538.5 - BARRIER MEMBRANE, WELDED BY TORCH

Manufacturer: Product:

IKO Industries Ltd Armour Bridge/Pont 4.5 mm *

Soprema Roofing & Waterproofing Inc. Sopralene Flam Antirock Membrane, Antirock Primer & Tackcoat

Required Laydown Temperature - Hot Bituminous Pavement (538.3.5) = 290 - 330 deg. F

G. ITEM 538.6 - BARRIER MEMBRANE, WELDED BY TORCH - MACHINE METHOD

Manufacturer: Product:

IKO Industries Ltd Armour Bridge/Pont 4.5 mm *

Soprema Roofing & Waterproofing Inc. Sopralene Flam Antirock Membrane, Antirock Primer & Tackcoat

Required Laydown Temperature - Hot Bituminous Pavement (538.3.5) = 290 - 330 deg. F

H. URETHANE LIQUID MEMBRANE

Use only when specified.

Manufacturer:Product:Gates ManufacturingGacoflex LM60W.R. Grace & Co.Bituthene LM-3000

I. MOISTURE METER (For concrete bridge decks)

Manufacturer: Product:

Sovereign Chemical Industries, Ltd. Dual Probe Moisture Master Tramex, Ltd Tramex Concrete Encounter

J. FIXED-ALIGNMENT ADHESION TESTER TYPE I

Manufacturer: Product:

Proceq SA Proceq Dyna Z6 Pull Off Tester with digital manometer *

K. FIXED-ALIGNMENT ADHESION TESTER TYPE II

Manufacturer: Product:

Elcometer Instruments, Ltd Elcometer 106 Adhesion Tester, Scale 1

SECTION 541 - WATERSTOPS (PVC)

A. ITEM 541.1 - NH TYPE 1

Manufacturer: Product:

Greenstreak 781 (Ribbed), 721 (Ribbed Split), 741 (Dumbbell)

Paul Murphy Plastics FR-4316 (Ribbed)

Tamms 300 (Ribbed Split), DB-8 (Dumbbell)

Vinylex RB4-316 (Ribbed), RSB4-316 (Ribbed Split), D4-316 (Dumbbell)

Vulcan 8036 (Ribbed Split), 8040 (Dumbbell)

^{*} Use either Elastocol 500 Primer or Roofcraft Modified Asphalt Primer for both the primer and tack coat.

^{*} Use either Elastocol 500 Primer or Roofcraft Modified Asphalt Primer for both the primer and tack coat.

^{*} For testing of membrane and substrate as specified. Requires 50 mm test discs.

^{*} For testing of substrate as specified. Requires 20 mm test discs.



Section 541 - continued

Vulcan

B. ITEM 541.2 - NH TYPE 2

Manufacturer: **Product:**

Greenstreak 703 (Ribbed), 723 (Ribbed Split)

CR-6316 (Ribbed), SR-6316 (Ribbed Split) Paul Murphy Plastics

Tamms 4B (Ribbed), 400 (Ribbed Split)

RB6-316 (Ribbed), RSB6-316 (Ribbed Split) Vinylex Vulcan

8021 (Ribbed), 8032 (Ribbed Split)

C. ITEM 541.3 - NH TYPE 3

Manufacturer: Product:

Greenstreak 780 (Ribbed), 757 (Dumbbell)

CR-6380 (Ribbed), SR-6380 (Ribbed Split) Paul Murphy Plastics

Tamms 4C (Ribbed), 400C (Ribbed Split)

RB6-14 (Ribbed), RSB6-14 (Ribbed Split), DBG-14 (Dumbbell) Vinylex

8068 (Ribbed), 8028 (Dumbbell)

D. ITEM 541.4 - NH TYPE 4

Manufacturer: **Product:**

Greenstreak 696 (Ribbed), 753 (Ribbed Split) 7F (Ribbed), DB-6 (Dumbbell) Tamms

RLB9-38 (Ribbed), DB9-38 (Dumbbell), DSB9-38 (Dumbbell) Vinylex

8077 (Ribbed), 8031 (Dumbbell) Vulcan

E. ITEM 541.5 - NH TYPE 5

Manufacturer: Product: Greenstreak 769 (Ribbed) Vinylex L85-14 (Ribbed)

SECTION 548 - ELASTOMERIC BEARING PADS

A. EPOXY ADHESIVE FOR BEARING PADS

Manufacturer:

Delta AS23-18 A&B Gel Type Epoxy Adhesive Delta Plastics Co. Sika Corp. Sikadur 32, Hi-Mod LPL Structural Epoxy Adhesive

SECTION 550 - STRUCTURAL STEEL

A. FAST SETTING GROUTS FOR ANCHOR BOLTS (550.3.15.4)

Manufacturer: **Product:**

Sure Grip Utility Grout Dayton Superior Minwax Construction Products Division Super Por Rok

B. STICK WAX FOR HIGH STRENGTH A325 & A490 FASTENERS

Manufacturer: **Product:**

Stick Wax Lubricant Castrol Industrial of North America TrueTap Wax Stick CRC Industries, Inc. Relton Stick Kut

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Section 550 - continued

C. PREFORMED FABRIC BEARING PADS (550.2.6)

Manufacturer: Product:

Beemer Precision Co. Beeco Preformed Fabric, Type 1

Boston Industrial Viblon
Buckeye Rubber Products Buckfab

Con-Serv PF Preformed Fabric Pad

Elkhart Rubber Shockpad

Fabreeka Products Co. Fabreeka Bearing Pad

JVI Inc. Carpralon Voss Engineering Sorbtex

D. ITEM 550.29 - BRIDGE SHOES (ISOLATION BEARINGS)

Manufacturer: Product:

Dynamic Isolation Systems, Inc.

Elastomeric Isolator
Earthquake Protection Systems, Inc.

R.J. Watson, Inc.

Seismic Energy Products, L.P.

Skellerup Oiles Seismic Protection, LLC

Elastomeric Isolator
Elastomeric Isolator

SECTION 552 - REHABILITATION OF EXPANSION BRIDGE SHOES

A. ITEM 552.2 - LUBRICATION (Lithium Base NGLI-2 Grade)

Manufacturer:Product:ExxonBeacon P 290TexacoMarfax (All Purpose)

SECTION 559 - JOINT SEAL

A. ITEM 559.4 - ELASTOMERIC PLUG TYPE EXPANSION JOINT

Manufacturer: Product:

Dynamic Surface Applications, Ltd
Dynamic Surface Applications, Ltd.
Dynamic Surface Applications, Ltd.
Pavetech International, Inc.

BJS with Road Repair Systems Material: BJ Super
Thorma-Joint with Road Repair Systems Material: BJ Super
Matrix 502 with Matrix 502 Polymer-Modified Bridge Joint Binder

Watson Bowman Acme/Harris Specialty Chem Expandex Joint with Wabo Expandex Material

Wyoming Equipment Sales, Inc. A.P.J. Asphalt Plug Expansion Joint System with APB binder

B. ITEM 559.5 - SILICONE JOINT SEALANT

The use of primer is required with these products unless waived by the Engineer.

Manufacturer: Product:

 Dow Corning Corp.
 Dow Corning 888 (Non-sag, for vertical and horizontal joints)

 Dow Corning Corp.
 Dow Corning 890-SL (Self-leveling, for horizontal joints only)

SECTION 560 - PREFABRICATED COMPRESSION SEAL EXPANSION JOINT

A. PREFABRICATED COMPRESSION SEAL EXPANSION JOINT

Manufacturer: Product:

D.S. Brown Delastic "CV" Series
Elastomer "M" and "X" Series
RUBATEX "RPB" Series
Structural Accessories "SA" Series
Watson, Bowman & Acme "WJ" Series



SECTION 561 - PREFABRICATED EXPANSION JOINT

A. PREFAB. EXPANSION JOINT "TYPE A" (STRIP SEAL)

Manufacturer: Product

D.S. Brown "A2, L2, H & NY" Series (SSA2, SSE2, SSCM2, SSPA steel shapes only)

ESCO Seal E, A, M, C steel shapes only

Structural Accessories "Onflex" Series Watson Bowman Acme "SE" Series

B. PREFAB. EXPANSION JOINT "TYPE B" (BOX SEAL)

Manufacturer:Product:D.S. Brown"MA" SeriesWatson, Bowman & Acme"D" Series

C. PREFORMED FABRIC TROUGH (Used with prefabricated finger joints)

Manufacturer: Product:

Fabreeka Products Co. Flexible Drain Trough

Thermoid of H.B.D. Industries, Inc

3-ply PNT 50 Saniwhite 3/64 x FS
Voss Engineering

15 oz. Flexible Drain Trough

SECTION 562 - ELASTOMERIC SEALANT

A. ELASTOMERIC SEALANT (Vertical Joints)

Contact the Bureau of Materials & Research, tel. 603-271-3151, if this product category is required.

B. ELASTOMERIC SEALANT (Horizontal Joints)

Contact the Bureau of Materials & Research, tel. 603-271-3151, if this product category is required.

SECTION 563 - BRIDGE RAILING

A. ANCHOR BOLTS W/RESIN ADHESIVE

Products are qualified based on a review of ICC-ES (www.icc-es.org) Evaluation Reports for the following ultimate capacities (embedment depth of 9 times the nominal anchor diameter): 3/4" dia. (28.4 kips), 7/8" dia. (39.25 kips), and 1" dia. (51.5 kips).

Manufacturer shall certify that the supplied system (materials, size, embedment, capacity) meets the design requirements specified.

Manufacturer:Product:Adhesives Technology Corp (fmrly US Anchor)HS-200Hilti, Inc.HIT-RE 500Hilti, Inc.HSE 2421

Simpson Strong-Tie SET High Strength Epoxy

Unitex Pro-Poxy 300
Unitex Pro-Poxy 300 Fast
Unitex Pro-Poxy 400

Note: Random proof test(s) of installed systems will be ordered by the Engineer.

B. AASHTO M 251 PADS

Manufacturer: Product:

WARCO 50-E-52 (Neoprene) Pad

C. RANDOM-ORIENTED FIBER PADS

Manufacturer: Product:

Fabreeka International

JVI

Voss Engineering Inc.

SA-47 Bearing Pads
Comcord Pads
VOSSCO



SECTION 566 - ELASTOMERIC JOINT SEAL

A. ELASTOMERIC JOINT SEAL

See qualified list for Section 560.

SECTION 581 - BRICK AND BLOCK MASONRY

A. ASPHALT-PRIMER (SOLVENT TYPE)

Manufacturer:Product:Tamms IndustriesDehydratine #4



A. ITEM 593.ABC - GEOTEXTILES

A = Application B = Strength Class C = Structure

1 =Subsurface Drainage 0 =Class 0 (Extra High Strength) 0 =Contractor Option

2 =Separation 1 =Class 1 (High Strength) 1 =Nonwoven (Default - Applic. 1 & 4)

3 = Stabilization2 = Class 2 (Medium Strength)2 = Monofilament, Woven4 = Permanent Erosion Control3 = Class 3 (Low Strength)3 = Slit Filament, Woven

Manufacturer & Product	QUALIFIED FOR		
	Α	В	С
Belton Industries, Inc	Application	Strength Class	Structure
Beltech 315, Style 977	2,3	1,2,3	3
	А	В	С
Carthage Mills	Application	Strength Class	Structure
FX-60HS	, , ,	2,3	1
Carthage 6%	2,3	2,3	2
	Α	В	С
GSE Lining Technologies, Inc.	Application	Strength Class	Structure
NW4	* *	3	1
NW6		2,3	1
NW8	1,2,3,4	1,2,3	1
	А	В	С
LINQ Industrial Fabrics, Inc.	Application	Strength Class	Structure
160EX	1,2,3,4	2,3	1
180EX	1,2,3,4	2,3	1
	А	В	С
Propex, Inc. (formerly Amoco Fabrics & Fiber Co.)	Application	Strength Class	Structure
Geotex 250ST	2,3	2,3	3
Propex, Inc. (formerly SI Geosolutions)			
Geotex 104F	2,3	3	2
501	1,2,3	3	1
601	1,2,3,4	2,3	1
701	1,2,3,4	2,3	1
801	1,2,3,4	2.3	1



A. ITEM 593.ABC - GEOTEXTILES (Cont'd)

A = Application B = Strength Class C = Structure

 $1 = Subsurface \ Drainage \qquad \qquad 0 = Class \ 0 \ (Extra \ High \ Strength) \qquad \qquad 0 = Contractor \ Option$

2 = Separation 1 = Class 1 (High Strength) 1 = Nonwoven (Default - Applic. 1 & 4)

3 = Stabilization2 = Class 2 (Medium Strength)2 = Monofilament, Woven4 = Permanent Erosion Control3 = Class 3 (Low Strength)3 = Slit Filament, Woven

Manufacturer & Product QUALIFIED FOR

	А	В	С
Skaps Industries	Application	Strength Class	Structure
GT142	1,2,3	3	1
GT160	1,2,3,4	2,3	1
GT170	1,2,3,4	2,3	1
GT180	1,2,3,4	1,2,3	1
TenCate Geosynthetics	Application	Strength Class	Structure
Mirafi 600X / Polyfelt PP15	2,3	1,2,3	3
Mirafi 500X / Polyfelt PP10	2,3	3	3
Mirafi 180N / Polyfelt TN80	1,2,3,4	2,3	1
Polyfelt TN45	1,2,3	3	1
Mirafi FW404 / Polyfelt PW44	2,3	1,2,3	3
Mirafi 160N / Polyfelt TN60	1,2,3,4	2,3	1
Mifafi 550X	2,3	2,3	3
US Fabrics, Inc.	Application	Strength Class	Structure
US 670	2,3	2.3	2
US 160NW	1,2,3,4	2,3	1
US 180NW	1,2,3,4	2,3	1
	A	В	С
WEBTEC, Inc.	Application	Strength Class	Structure
Terratex GS-250	2,3	2,3	3
Terratex N07	1,2,3,4	2,3	1
Terratex N08	1,2,3,4	1,2,3	1



SECTION 603 - CULVERTS AND STORM DRAINS

A. POLYETHYLENE (HDPE)

Qualified Manufacturers:

Manufacturer:

Advanced Drainage Systems, Inc. Baughman Tile Co. Blue Diamond Industries, LLC Crumpler Plastic Pipe, Inc. Hancor, Inc.

Haviland Drainage Products Lane Enterprises, Inc.

Soleno, Inc.

B. POLYVINYL CHLORIDE (PVC)

Qualified Manufacturers:

Manufacturer:

Contech Construction Products

SECTION 604 - CATCH BASINS, DROP INLETS, AND MANHOLES

A. FIBER REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES

Note: Use of fiber reinforcement is only allowed for drainage structures with a maximum diameter of 4'.

Manufacturer:Product:W.R. GraceStrux 90/40 FibersForta CorporationForta Ferro

SECTION 605 - UNDERDRAINS

A. POLYETHYLENE (HDPE)

Qualified Manufacturers:

Manufacturer:

Advanced Drainage Systems, Inc. Baughman Tile Co.
Blue Diamond Industries, LLC
Crumpler Plastic Pipe, Inc.
Hancor, Inc.
Haviland Drainage Products
Lane Enterprises, Inc.
Soleno, Inc.

B. POLYVINYL CHLORIDE (PVC)

Qualified Manufacturers:

Manufacturer:

Contech Construction Products



SECTION 606 - GUARDRAIL

A. COMPOSITE MATERIAL BLOCKS

Use only when specified.

Contact Materials & Research (603-271-3151) for products when required.

B. ITEM 606.9512 - IMPACT ATTENUATION DEVICE (Redirective), Test Level 2

Manufacturer:Product:Barrier Systems, IncUniversal Tau-IIEnergy Absorption Systems, IncQuadguardWork Area Protection Corp.SCI200 GM

C. ITEM 606.9513 - IMPACT ATTENUATION DEVICE (Redirective) Test Level 3

Manufacturer:Product:Barrier Systems, Inc.Universal Tau-IIEnergy Absorption Systems, IncQuadGuardWork Area Protection Corp.SCI200 GM

D. ITEM 606.9522 - IMPACT ATTENUATION DEVICE (Non-redirective), Test Level 2

Sand or liquid filled devices may be used when allowed by specification.

Manufacturer:Product:Energy Absorbtion Systems, Inc.N.E.A.T.

E. ITEM 606.9523 - IMPACT ATTENUATION DEVICE (Non-redirective), Test Level 3

Sand or liquid filled devices may be used when allowed by specification. When sand or liquid filled devices are not allowed by specification, use a product listed under "C. ITEM 606.9513 - IMPACT ATTENUATION DEVICE (Redirective) Test Level 3."

F. ITEM 606.1454 - BEAM GUARDRAIL TERMINAL UNIT EAGRT, 50 FT (15.2m)

Manufacturer:Product:Road Systems, IncSKT 350

Trinity Industries, Inc. ET-Plus (formerly ET-2000 Plus)

G. ITEM 606.1455 - BEAM GUARDRAIL TERMINAL UNIT EAGRT, 25 FT. (7.6 m)

Manufacturer:Product:Road Systems, IncSKT 350Trinity Industries, IncET-2000 Plus

SECTION 609 - CURBS

A. CEMENT MORTAR FOR BRIDGE CURB BEDDING

Manufacturer: Product:

AH Harris Construction Grout

BASF (formerly Master Builders, Inc.) Set Grout Conspec Marketing & Manufacturing Co. Enduro #50

Dayton Superior 1107 Advantage Grout

Dayton Superior Sure-Grip High Performance Grout

Five Star Products Structural Concrete

B. POLYESTER FIBERS FOR BITUMINOUS CURB

Manufacturer: Product

Advanced Fiber Solutions, Inc

GFC Materials Co.

Kapejo Inc.

Specialty Fibers Direct

P440 Fibers, White or Black
Petroflex Type 450
Boni Fibers Type B
P440 Fiber, Black or White



SECTION 616 - TRAFFIC SIGNALS

A. SAW CUT LOOP SEALANT

Manufacturer:Product:3MLoop Sealant

BASF (Formerly Degussa) Gold Label All Season Loop Sealant (formerly Gold Label Loop Sealant)

Chemque, Inc.Q-Seal 290S Detector Loop SealantChemque, Inc.Q-Seal 296-06 Detector Loop Sealant

Dynatron/Bondo Corp.Bondo P-606 DetectorRAI ProductsPermanent Sealer 974RAI ProductsPro-Seal 6006Statler PaintsStat-A-Flex Poly Seal

SECTION 619 - MAINTENANCE OF TRAFFIC

A. TEMPORARY RAISED PAVEMENT MARKERS

Manufacturer: Product:
Astro Optics Corp. Model TPM

Filtrona Extrusion (Davidson) RPM Durable Pavement Marker

Filtrona Extrusion (Davidson) TOM Road Marker

SECTION 632 - RETROREFLECTIVE PAVEMENT MARKINGS

A. ITEM 632.1 - PREFORMED RETROREFLECTIVE TAPE, TYPE I (REMOVABLE)

Manufacturer:Product:3MSeries 620

Advance Traffic Markings ATM 200 Removable Construction Grade Brite-Line Technologies, Inc Brite-Line Series 100 Removable Tape

Lafarge Road Marking Prismoline TRT Series T-2512

Trelleborg Industries Trelleborg Removable Road Tape RY-140 (Yellow)
Trelleborg Industries Trelleborg Removble Road Tape RW-140 (White)

B. ITEM 632.5 - PREFORMED RETROREFLECTIVE TAPE, TYPE V

Note: This category is for longitudinal lines, legends, and symbols, except for the word "ONLY" and arrows.

Manufacturer: Product: 3M Series 380-I

Brite-Line Technologies, Inc. Brite-Line Series 1000 Durable Tape

C. ITEM 632.6 - PREFORMED RETROREFLECTIVE TAPE, TYPE VI

Note: This category is for transverse markings, and the word "ONLY" and arrows.

Manufacturer: Product: 3M Series 380-1

Brite-Line Technologies,Inc. Brite-Line Series 1000 Durable Tape

D. ITEMS 632.81 & 632.82 - RAISED PAVEMENT MARKERS (SINGLE, DOUBLE FACE)

Manufacturer:Product:Astro Optics Corp.Model TPM

Filtrona Extrusion (Davidson) RPM Durable Pavement Marker

E. Not currently used.

F. ITEM 632.9 - PREFORMED BLACKOUT TAPE, TYPE I (REMOVABLE)

Note: This category is for temporary obliteration of pavement markings.

Manufacturer: Product:

Advance Traffic Markings ATM 280 Hide A Line Brite-Line Technologies, Inc. Deltaline BTR

Swarco Industries, Inc.

Director 2 Blackout Removable Tape
Trelleborg Industries

Trelleborg Removable Tape RB-140



SECTION 645 - EROSION CONTROL

A. ITEM 645.1 - MULCH

Manufacturer: Product:

Outdoor World of New England Kid Kushion Playground Mulch

Contact Roadside Development Section, Bureau of Highway Design, 603-271-6476

B. ITEM 645.21 - SLOPE STABILIZATION (2:1 OR FLATTER)

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 271-6476.

<u>Manufacturer:</u> <u>Product:</u>

American Excelsior Company AEC Premier Straw DN (formerly SS-G2) (2:1 or less)

American Excelsior Company AEC Premier Straw Double Net Quick Mow (formerly SS-W2) (2:1 or less)
American Excelsior Company AEC Premier Straw Single Net Quick Mow (formerly SS-W1) (3:1 or less)

American Excelsior Company AEC Premier Straw SN (formerly SS-G1)(3:1 or less)

Conwed Fibers Futerra
East Coast Erosion Blankets, LLC ECS-1
East Coast Erosion Blankets, LLC ECS-2

Greenfix America WS05 (3:1 or less)
Greenfix America WS052 (3:1 or less)

Hydrograss Corp.Com Straw Erosion Blanket II BN

North American Green DS150

North American Green DS75 (3:1 or less)

North American Green S150
North American Green S150BN
North American Green S75 (3:1 or less)
North American Green S75BN (3:1 or less)
North American Green SC150BN
PPS Packaging Co. (Western Excelsior) Excel Regular

Rhino Seed & Landscape Supply Rhino Erosion King Straw Blanket (Double net high velocity straw blanket)

SI Geosolutions (formerly Bonterra America)

Landlok S1 (3:1 or less) (6 fps)

SI Geosolutions (formerly Bonterra America)

Landlok S2 (3:1 or less) (10 fps)

 Verdyol Plant Reasearch, LTD
 Contech SFB1

 Verdyol Plant Reasearch, LTD
 Contech SFB2

 Verdyol Plant Reasearch, LTD
 Contech SFB2BD

 Western Excelsior Corporation
 XCEL CS-3 All Natural

 Western Excelsior Corporation
 XCEL SR-1 (3:1or less)

Western Excelsior Corporation XCEL SR-1 All Natural (3:1 or less)

Western Excelsior Corporation XCEL SS-2

Western Excelsior Corporation XCEL SS-2 All Natural Western Excelsior Corporation XCEL SS-2 w/rapid go netting

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer.

These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.



Section 645 - continued

C. ITEM 645.22 - SLOPE STABILIZATION (STEEPER THAN 2:1)

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476. Note: Products in this category are also acceptable for use under Item 645.21

Manufacturer:Product:American Excelsior CompanyCurlex IAmerican Excelsior CompanyCurlex IIAmerican Excelsior CompanyCurlex Quickgrass

East Coast Erosion Blankets, LLC ECSC-2 Greenfix America C4 Greenfix America C7 CF072B Greenfix America Greenfix America CF072RR CFS072B Greenfix America CFS072R Greenfix America Greenfix America WS072 WS072B Greenfix America

Hydrograss Corp. Com Straw Erosion Blanket II BN

North American Green C125 C125BN North American Green North American Green SC150 SC150BN North American Green PPS Packaging Co. (Western Excelsior) Excel Super Duty PPS Packaging Co. (Western Excelsior) Excel Superior SI Geosolutions (formerly Bonterra America) Landlok CS2 Verdyol Plant Reasearch, LTD Contech CFB2 Verdyol Plant Reasearch, LTD Contech CFB2BD Verdyol Plant Reasearch, LTD Contech SCFB2 Verdyol Plant Reasearch, LTD Contech SCFB2B Western Excelsior Corporation XCEL CC-4

Western Excelsior Corporation XCEL CC-4 All Natural

Western Excelsior Corporation XCEL CS-3

Western Excelsior Corporation XCEL CS-3 All Natural

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.

D. ITEM 645.23 - CHANNEL STABILIZATION (LOW VELOCITY)

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476.

Manufacturer: Product:

 American Excelsior Company
 Curlex I (5 fps max.)

 American Excelsior Company
 Curlex II (7 fps max.)

 American Excelsior Company
 Curlex Quickgrass (5 fps max.)

Greenfix America WS05 (6 fps max.)
Greenfix America WS052 (8 fps max.)
Greenfix America WS072 (9 fps max.)
Greenfix America WS072B (9 fps max.)
Hydrograss Corp. Com Straw Erosion Blanket II BN

Indian Valley Industries, Inc. Sedimat

North American Green SC150 (8 fps max.) SC150BN (8 fps max.) North American Green PPS Packaging Co. (Western Excelsior) Excel Regular (5 fps max.) Excel Superior (7 fps max.) PPS Packaging Co. (Western Excelsior) Synthetic Industries Landlok 407 GR (5 fps max.) Verdyol Plant Reasearch, LTD Contech CFB2(12fps) Verdyol Plant Reasearch, LTD Contech SCFB2(10 fps) Verdyol Plant Reasearch, LTD Contech SCFB2B (10 fps)

Western Excelsior Corporation XCEL CS-3

Western Excelsior Corporation XCEL CS-3 All Natural

Western Excelsior Corporation XCEL R-1 Green Dyed (5fps max)

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.



Section 645 - continued

E. ITEM 645.24 - CHANNEL STABILIZATION (HIGH VELOCITY)

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476. Note: Products in this category are also acceptable for use under Item 645.23

 Manufacturer:
 Product:

 American Excelsior Company
 Curlex III (HV) (10 fps max)

Greenfix America C4 (10 fps max.) C7 (10 fps max.) Greenfix America CF072B (14 fps max.) Greenfix America Greenfix America CFS072B (10 fps max.) Greenfix America CFS072R (10 fps max.) Greenfix America CFS072RR (14 fps max.) North American Green C125 (10 fps max.) North American Green C125BN (10 fps max.) PPS Packaging Co. (Western Excelsior) Excel Superduty (12 fps max.) Landlok C2 (15 fps max.)

SI Geosolutions (formerly Bonterra America)

Verdyol Plant Reasearch, LTD

Verdyol Plant Reasearch, LTD

Verdyol Plant Reasearch, LTD

Verdyol Plant Reasearch, LTD

Contech CF7

Verdyol Plant Reasearch, LTD

Contech CF7

Contech CFR2

Verdyol Plant Reasearch, LTD Contech CFB2 (12 fps)

Western Excelsior Corporation XCEL CC-4

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.

F. ITEM 645.25 - PERMANENT STABILIZATION

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476.

Manufacturer: Product:

Colbond Geosynthetics Enkamat 7010 (Slopes & Channels)
Colbond Geosynthetics Enkamat 7020 (Slopes & Channels)

North American Green C350 (10-18 fps) North American Green P300 (9-14 fps)

PPS Packaging Co. (Western Excelsior) Excel Permamat-100 (Slopes & 7-12 fps Channels)
PPS Packaging Co. (Western Excelsior) Excel Permamat-200F (Slopes & 7-12 fps Channels)

Synthetic Industries Contech TRM C-35
Synthetic Industries Contech TRM C-45
Synthetic Industries Contech TRM C-50
Synthetic Industries Contech TRM C-60
Synthetic Industries Contech TRM C-61

Synthetic Industries LandLok TRM1060 (8-20 fps) Synthetic Industries LandLok TRM450 (8-18 fps)

Synthetic Industries Pyramat

Webtec, Inc.Terra Jute (Slopes)Western Excelsior CorporationXCEL PP-5-10Western Excelsior CorporationXCEL PP-5-12

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.

G. ITEM 645.531 - SILT FENCE

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476. Note: In addition to those products meeting NHDOT specifications under this category, the following products are qualified for use:

Manufacturer:Product:Environmental Research Corp.BioFence

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.



Section 645 - continued

H. TACKIFIERS

For specific product information, contact the Roadside Development Section, Bureau of Highway Design, 603-271-6476.

Manufacturer: **Product:** Acadia Eco-Products Earth Bond CHEMSTAR StarTak 100 CHEMSTAR StarTak 600 Ecotak OP Eastern Products, Inc. Eastern Products, Inc. Ecotak Sat EC3000 Erosion Control Technologies Reinco Inc. Reinco RMBplus

Qualified products shall be used in accordance with the manufacturer's specified conditions & installed as directed by the manufacturer. These conditions & installation instructions shall be furnished to the Engineer at least 10 working days prior to actual delivery & installation on the project.

SECTION 718 – RETROREFLECTIVE SHEETING

A. RETROREFLECTIVE SHEETING

Contact Traffic Bureau (603-271-2291) for a listing of qualified products.